

originally provided in the specification with a version placing the sequence listings in proper form. This submission includes no new matter.

CONCLUSION

Accordingly, Applicants submit that application is now in condition for allowance. A Notice of Allowance is requested, and a prompt mailing thereof would be much appreciated.

Should the Examiner have any questions concerning this communication, he is welcome to contact the undersigned attorney at (650) 330-0900.

Respectfully submitted,

By: _____

Mark A. Wilson

Mark A. Wilson

Registration No. 43,275

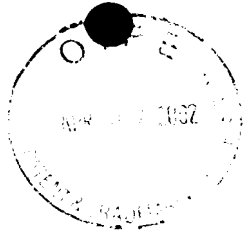
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Menlo Park, California 94025
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Attorney Docket No. 2000-0007
U.C. Docket No. B02-016
Serial No. 10/006,909



APPENDIX A

SEQUENCE LISTING



SEQUENCE LISTING

<110> KEASLING, JAY
MARTIN, VINCENT
PITERA, DOUGLAS
KIM, SEON-WON
WITHERS III, SYDNOR T.
YOSHIKUNI, YASUO
HEWMAN, JACK
KHILEBNIKOV, ARTEM VALENTINOVICH

<120> BIOSYNTHESIS OF ISOPENTENYL PYROPHOSPHATE

<130> 2000-0007

<140> 10/006,909

<141> 2001-12-06

<160> 14

<170> PatentIn Ver. 2.1

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<211> 1185

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<213> Artificial Sequence

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| ctcgtttcca | ccagcgccat | cgacctgggg | gcgacagtaa | ttaaagccgc | cattgaacgt | 120 |
| gcaaaaatcg | attcacaaca | cgttgatgaa | gtgattatgg | gtaacgtgtt | acaagccggg | 180 |
| ctggggcaaa | atccggcgcg | tcaggcactg | ctaaaaagcg | ggctggcaga | aacggtgtgc | 240 |
| ggattcaagg | tcaataaagt | atgtgggtcg | ggtcttaaaa | gtgtggcgct | tgccgcccag | 300 |
| gccattcagg | caggtcaggc | gcagagcatt | gtggcggggg | gtatggaaaa | tatgagttta | 360 |
| gccccctact | tactcgatgc | aaaagcacgc | ctctggtatc | gtcttgga | cggacaggtt | 420 |
| tatgaagtaa | tcttgpgga | tggcctgatg | tgcgccaccc | atggttatca | tatggggatt | 480 |
| accgcgcgaa | acgtggctaa | agagtaagga | attaccggtg | aaatgcagga | tgaactggcg | 540 |
| ctacattcac | agcgtaaaag | ggcagcgcca | attgagtcgg | gtgcttttac | agccgaaatc | 600 |
| gtcccggtaa | atgttgccac | tggaaaagaa | acgttcgtct | tcagtcaaga | cgaattcccg | 660 |
| aaagcggaatt | caaagggtga | agcgtaggtt | gcattggccc | cggccttcga | taaagcagga | 720 |
| acagtcaccc | ctgggaacgc | gtctgggtatt | aacgaagggtg | ctgcgcctct | ggtgattatg | 780 |
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| agcggtggcg | tgcggccggc | attgatgggt | atgggggcag | tacctgccac | gcaaaaagcg | 900 |
| ttacaaatgg | cggggctgca | actggcggat | attgatctca | ttgaggctaa | tgaagcattt | 960 |
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| acactattac | atgcatgcca | ggcacgggat | aaaaagctgg | ggctggcaac | actgtgcatt | 1140 |
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<400> 2

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<211> 1509

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<211> 1332

<212> DNA

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<221> Description of Artificial Sequence: Synthetic
Mevalonate kinase nucleotide sequence

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<212> DNA

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<211> 1191

<212> DNA

<213> Artificial Sequence

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 sequence

<400> 6

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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 "MEVT" operon nucleotide sequence

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<223> Description of Artificial Sequence: Synthetic

"MEVB" operon nucleotide sequence

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| agggctctgat | aagtttgaa | tgcgtgtgaa | aagtaaacaa | tttaagatg | gggagtggct | 1800 |
| gtaccatata | agtcctaaaa | gtggcttcat | tctgttttgc | ataggcggat | ctaagaaccc | 1860 |
| tttcattgaa | aaagtattcg | ctaaagctatt | tagctacttt | aaacctaaca | tggacgacta | 1920 |
| ctgcaataga | aaattgttcg | ttattgatat | tttctctgat | gatgcctacc | attctcagga | 1980 |
| ggatagcgtt | acggaacatc | gtggcaacag | aagattgagt | tttcattcgc | acagaattga | 2040 |
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| tctaccaaa | gaataactgc | agcccggggg | atccactagt | tctagagcgg | ccgccaccgc | 4200 |
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| tgcgcagcct | gaatggcgaa | tggaaattgt | aagcgttaat | at ttgtttaa | aattcgcggt | 4440 |
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 <211> 549
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Description of Artificial Sequence: Synthetic
 Isopentenyl pyrophosphate isomerase (idi)
 nucleotide sequence

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 aatgccaaag gacaattatt agttaccgcg cgcgcactga gcaaaaaagc atggcctggc 180
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<210> 11
 <211> 900
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Description of Artificial Sequence: Synthetic
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 sequence

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<210> 12
 <211> 5051
 <212> DNA
 <213> Artificial Sequence

<220>
 <221> Description of Artificial Sequence: Synthetic

"MBI" operon nucleotide sequence

<400> 12

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<210> 13

<211> 5963

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic

"MBIS" operon nucleotide sequence

<400> 13

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| tcatttttta | accaataggc | cga | | | | 5963 |



Attorney Docket No. 2000-0007
U.C. Docket No. B02-016
Serial No. 10/006,909

APPENDIX B

STATEMENT TO SUPPORT FILING AND SUBMISSION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Atty. Docket No: 2000-0007

In re patent application of

KEASLING, JAY et al.

Serial No. 10/006,909

Filed: December 6, 2001

For: BIOSYNTHESIS OF ISOPENTENYL PYROPHOSPHATE



STATEMENT TO SUPPORT FILING AND SUBMISSION IN
ACCORDANCE WITH 37 C.F.R. §§ 1.821-1.825

Assistant Commissioner for Patents
Washington, D.C. 20231
Box SEQUENCE

Sir:

In connection with a Sequence Listing submitted concurrently herewith, the undersigned hereby states that:

1. the submission, filed herewith in accordance with 37 C.F.R. § 1.821(g), does not include new matter;

2. the content of the attached paper copy and the attached computer readable copy of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are the same; and

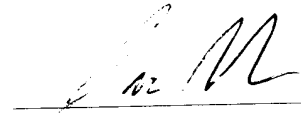
3. all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

Serial No. 10/006,909

States Code and that such willful false statements may jeopardize the validity of the application or any patent resulting therefrom.

Respectfully submitted,

January 15, 2002
Date


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